

#### STATE OF WASHINGTON

#### DEPARTMENT OF ECOLOGY

7601 W. Clearwater, Suite 102 • Kennewick, Washington 99336 • (509) 546-2990

July 20, 1992



Mr. Steve Wisness United States Department of Energy - Richland P.O. Box 550 MSIN: A5-19 Richland, Wa 99352

Dear Mr. Wisness:

(1)

. f 3

...

. .

Re: LIQUID EFFLUENT RETENTION FACILITY PROJECT FRE PIPING

CONDENSATE COMPATIBILITY TEST (EPA 9090)

This is in reference to your letter dated July 7, 1992 concerning the above subject.

The two main concerns these tests highlight are:

1. The fiber-reinforced piping will be susceptible to reduction of its tensile strength at cracked locations, as demonstrated in the first set of compatibility tests. The increase of the notch sensitivity of the lining epoxy observed in the second set of tests, will enhance the possibility of cracks to develop.

2. The tensile strength shows a decrease trend (see attached graph) after exposure to simulated condensate solution at 90°C.

90°C.

As recommended in the test report attached to your letter referenced above, on page 11, third paragraph, both brittleness and tensile strength tests should be carried out after exposure to 40°C and 90°C for 150, 180, 210, and 240 days.

RECEIVED
JUL 29 1992



AUG 1992 RECEIVED EDMC

102122 23 24

T.B. VENEZIANO

Mr. Steve Wisness Page 2 July 20, 1992

If you have any questions regarding this matter please call me at (509) 546-2995.

Sincerely,

Modes Jaraysi

Environmental Engineer, LERF Project Unit Manager Nuclear and Mixed Waste Management/Kennewick

MJ:mf

cc:

10

21/2 p

...

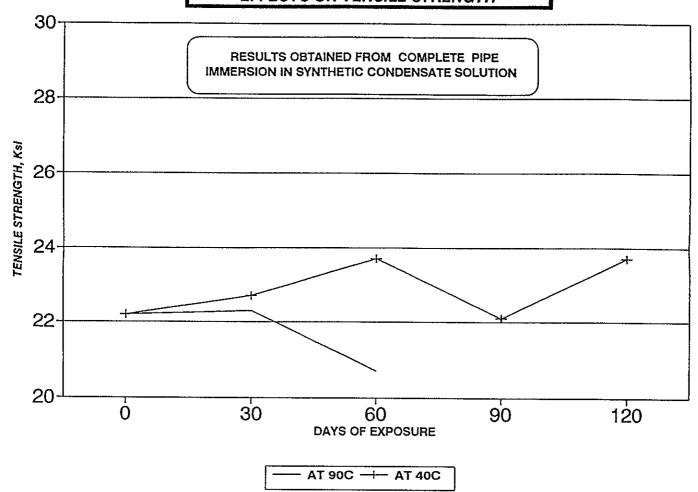
(34)

1

- G. T. Tebb (Ecology)
- D. Nylander (Ecology)
- T. Michelena (Ecology)
- D. Duncan (EPA)
- D. Bryson (USDOE-RL)
- T. Veneziano (WHC)

Administrative Record

# 9090 TEST ON FRE LERF PIPING EFFECTS ON TENSILE STRENGTH



S

13

10 C

\*\*\*

. 🤼

(N

 $\bigcirc$ 

# **CORRESPONDENCE DISTRIBUTION COVERSHEET**

Author

Addressee

Correspondence No.

M. Jaraysi, Ecology

S. H. Wisness, RL

Incoming: 9205088

10

. 0

subject: LIQUID EFFLUENT RETENTION FACILITY PROJECT FRE PIPING CONDENSATE

COMPATIBILITY TEST (EPA 9090)

### **INTERNAL DISTRIBUTION**

Approval	Date	Name	Location	w/att
	ł	Correspondence Control	A3-01	χ
		President's Office	B3-01	
		L. E. Borneman	B2-35	
		S. L. Bradley	B3-06	
		A. J. DiLiberto	R1-48	
		K. A. Hadley	R3-56	
		W. H. Hamilton, Assignee	N3-10	
		D. E. Kelley	R1-48	
		P. J. Mackey	B3-15	
		H. E. McGuire, Level 1	B3-63	
		R. W. Oldham	H4-57	
		T. B. Veneziano	B2-35	
		EDMC	H4-22	X

